

GENERAL

See [Figure 2-54](#). The front fork consists of two telescoping outer tube/inner slider assemblies. Each assembly has an internal compression spring which supports the forward weight of the vehicle and rider. The compression spring extends and retracts to cushion the ride over rough or irregular road surfaces. An oil filled damping mechanism controls the telescoping action of each tube/slider assembly.

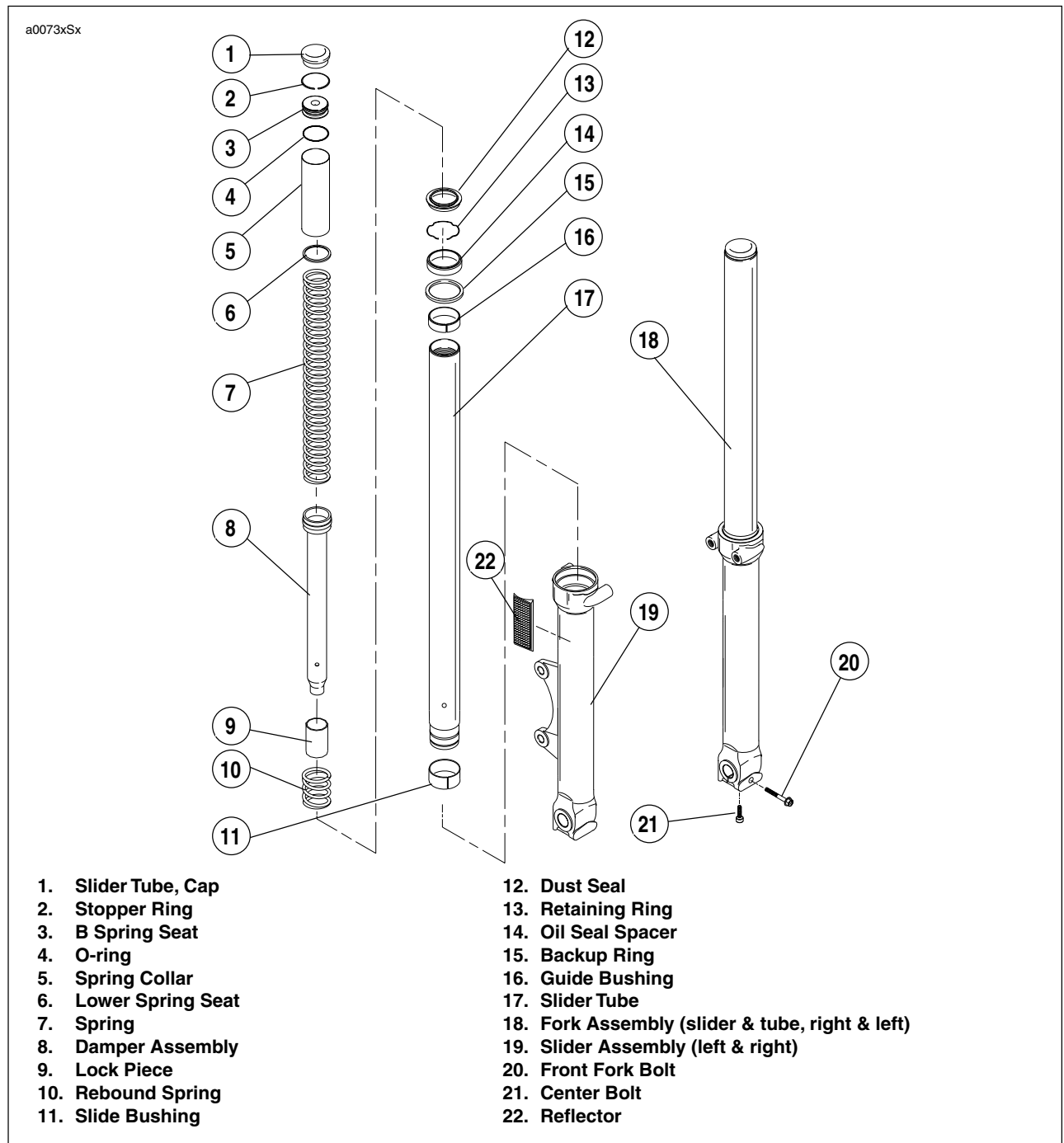


Figure 2-54. Front Fork Assembly

FRONT FORK REMOVAL

1. Raise front wheel off floor.
2. Detach front brake caliper from rotor. See [2.11 FRONT BRAKE CALIPER](#).
3. Remove front wheel. See [2.5 FRONT WHEEL](#).
4. Remove front fender. See [2.23 FENDERS](#).
5. See [Figure 2-55](#). Loosen head lamp bracket screws.

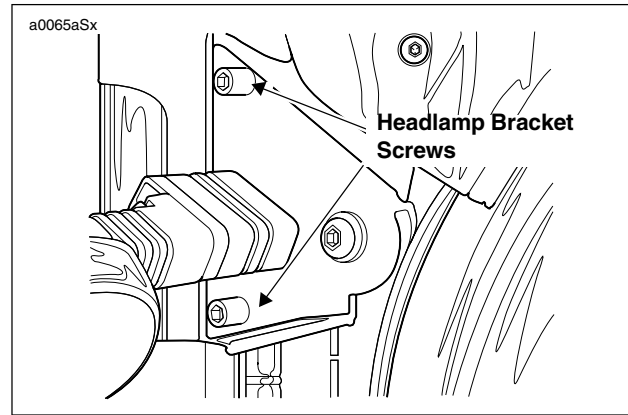


Figure 2-55. Headlamp Brackets

6. See [Figure 2-56](#). Loosen the large pinch screws on both the upper and lower triple clamps.

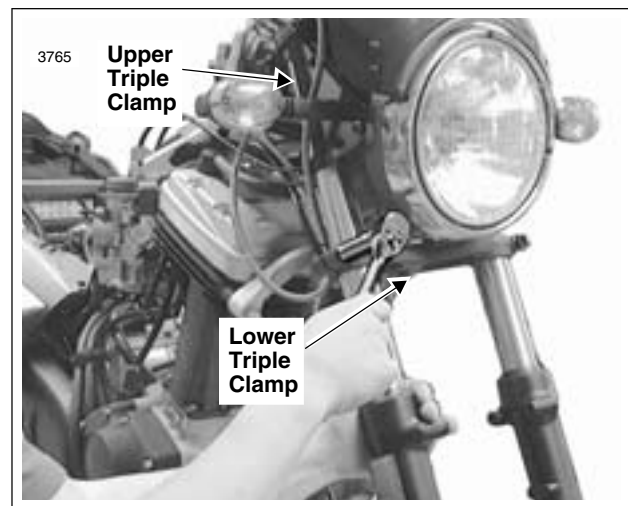


Figure 2-56. Pinch Screws

7. See [Figure 2-57](#). Remove front fork. Repeat procedure for the other front fork.



Figure 2-57. Front Fork Removal

FRONT FORK DISASSEMBLY

1. Remove front forks.
2. See [Figure 2-58](#). Clamp the fork in a vise with front fork holding tool (part no. B-4177).



Figure 2-58. Clamping the Fork

3. See [Figure 2-59](#). Remove slider tube cap.



Figure 2-59. Slider Tube Cap

4. See [Figure 2-60](#). Push down on the B-spring seat (O-ring included) and remove the stopper ring and spring seat.



Figure 2-60. B-Spring Seat

5. See [Figure 2-61](#). Remove the spring collar, lower spring seat and spring from slider tube.

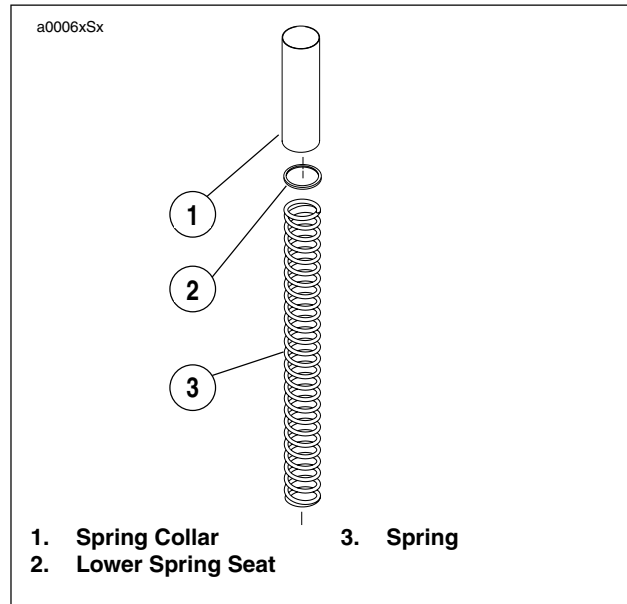


Figure 2-61. Removing Sub-Assembly

6. See [Figure 2-62](#). Remove the fork oil by pumping the fork leg and rod 8-10 times until the rod moves freely.



Figure 2-62. Pumping Fork Oil

7. See [Figure 2-63](#). Remove the center bolt (metric) from the bottom of the fork tube.



Figure 2-63. Removing Center Bolt

8. See [Figure 2-64](#). Remove the damper assembly, lock piece and the rebound spring from the slider tube.

CAUTION

Do not to scratch the slide pipe or the outer tube. Scratched tubes may leak fork oil and then must be replaced.

9. See [Figure 2-65](#). Remove the dust seal and the retaining ring from the slider tube.

10. See [Figure 2-66](#). Pull the slider tube out of the slider assembly. Remove oil seal, back-up ring and guide bushing.



Figure 2-64. Removing Damper



Figure 2-65. Removing Dust Seal

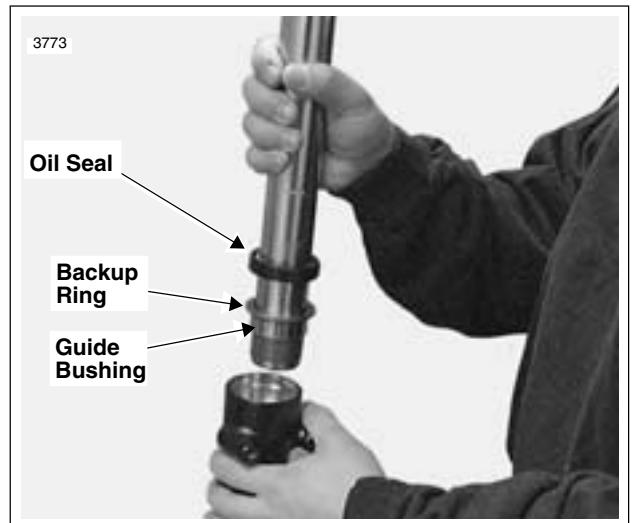


Figure 2-66. Removing Slider Tube

- See [Figure 2-67](#). Remove the slide bushing by prying the slide bushing at the split.



Figure 2-67. Removing Slide Bushing

CLEANING AND INSPECTION

- Thoroughly clean and inspect all parts. Replace any parts that are bent, broken or damaged.
- See [Figure 2-68](#). Check the slider tube for score marks, scratches and excessive or abnormal wear. Replace if worn or damaged.
- Check the slide bushing and the guide bushing for excessive wear or scratches. Replace if damaged or worn.
- Replace the retaining ring if distorted.
- Measure spring free length. Replace springs shorter than service wear limit of 12.8 in. (325 mm).
- Measure rebound spring free length. Replace springs shorter than service wear limit of .69 in. (17.4 mm).
- See [Figure 2-69](#). Measure slide pipe runout. Replace pipe if runout exceeds the service wear limit of 0.008 in. (0.2 mm).

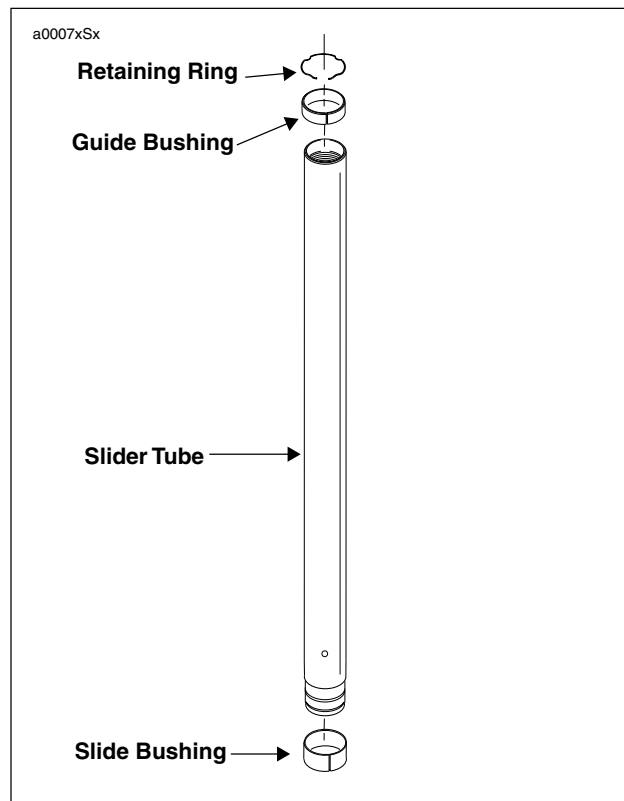


Figure 2-68. Slider tube Components

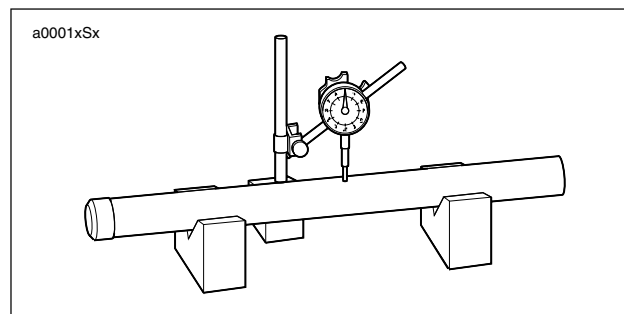


Figure 2-69. Pipe Runout

FRONT FORK ASSEMBLY

1. Coat the slide bushing with fork oil or sealing grease.
2. See [Figure 2-70](#). Install slide bushing onto the slide pipe.



Figure 2-70. Install Slide Bushing

3. See [Figure 2-71](#). Install damper assembly and rebound spring into slider tube.



Figure 2-71. Damper Assembly

4. See [Figure 2-72](#). Install lock piece into damper



Figure 2-72. Lock Piece

5. See [Figure 2-73](#). Clamp the slider assembly in a vise with front fork holding tool (part no. B-4177).



Figure 2-73. Clamping the Slider Assembly

6. See [Figure 2-74](#). Install slider tube into slider assembly.

CAUTION

The outer tube can move freely up and down on the slide pipe. Always hold both the slide pipe and outer tube to prevent damage to bushings and seals.



Figure 2-74. Slider Tube

7. See [Figure 2-75](#). Install spring onto damper assembly.



Figure 2-75. Install Rebound Spring

8. See [Figure 2-76](#). Install center bolt and washer.



Figure 2-76. Install Center Bolt

9. Coat the guide bushing with fork oil or sealing grease.
10. See [Figure 2-77](#). Install guide bushing onto the slide pipe.



Figure 2-77. Install Guide Bushing

11. See [Figure 2-78](#). Wrap the end of the slide pipe and the slide bushing channel with tape to avoid damaging the oil seal lip when installing.



Figure 2-78. Slider Tube Protection

12. Coat dust seal, oil seal spacer, and backup ring with fork oil or sealing grease.
13. See [Figure 2-79](#). Install oil seal spacer and backup ring.



Figure 2-79. Oil Seal and Backup Ring

14. See [Figure 2-80](#). Using FORK SEAL DRIVER (Part No. B-43991), drive the guide bushing with the oil seal spacer and oil seal into position in the slider assembly.



Figure 2-80. Fork Seal Driver

15. See [Figure 2-81](#). Install retaining ring. Verify ring is under groove inside slider assembly.

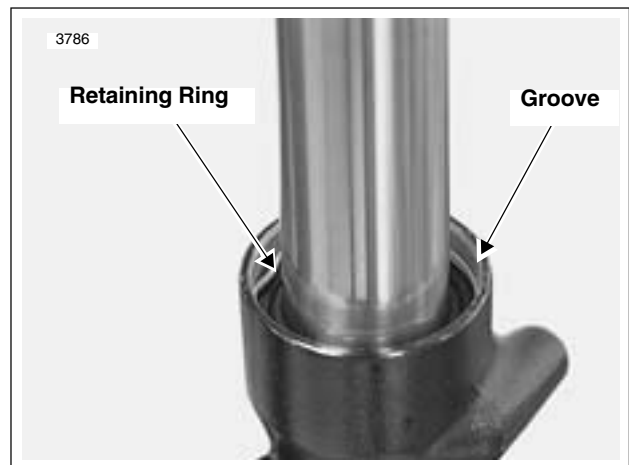


Figure 2-81. Install New Retaining Ring

16. See [Figure 2-82](#). Install new dust seal onto slide pipe.

17. See [Figure 2-83](#). Remove the tape from the slide pipe end.

NOTE

The recommended fork oil is hydraulic fork oil type "E".

18. Pour 9.2 oz. fork oil into fork.
 19. Install lower spring seat and spring collar.
 20. Coat a new O-ring with fork oil or sealing grease.
 21. Install new O-ring onto spring seat.
-
22. See [Figure 2-84](#). Push down on spring seat past groove to install stopper ring. Stopper ring will lock into groove when installed correctly.



Figure 2-82. Install New Dust Seal

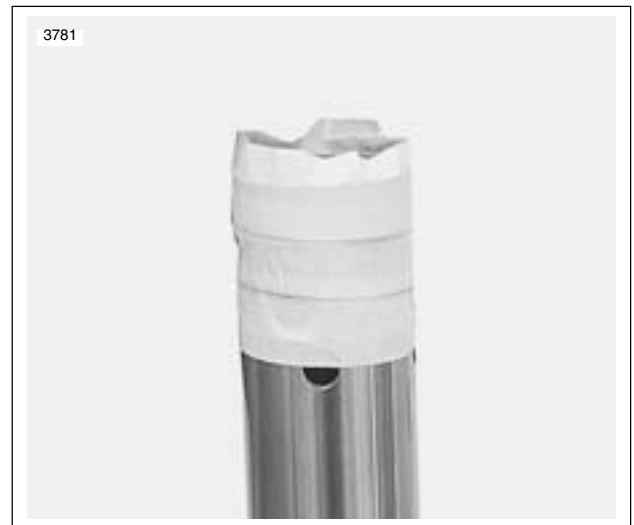


Figure 2-83. Remove Slider Tube Protection



Figure 2-84. Compressing Spring Seat

23. See [Figure 2-85](#). Install slider tube cap.



Figure 2-85. Slider Tube Cap

FRONT FORK INSTALLATION

1. See [Figure 2-86](#). Install fork tubes through upper and lower triple clamps.

NOTE

When installing the front forks, use a screwdriver to pry apart the triple clamps.

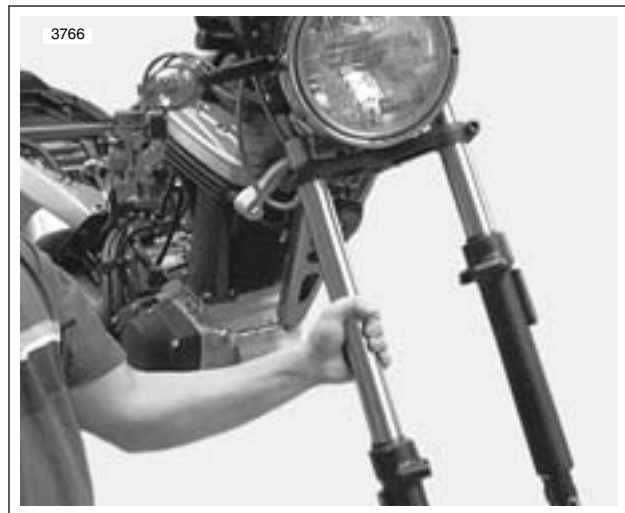


Figure 2-86. Installing Fork Tube

2. See [Figure 2-87](#). Apply LOCTITE ANTI-SEIZE to the threads of triple clamp pinch screws.

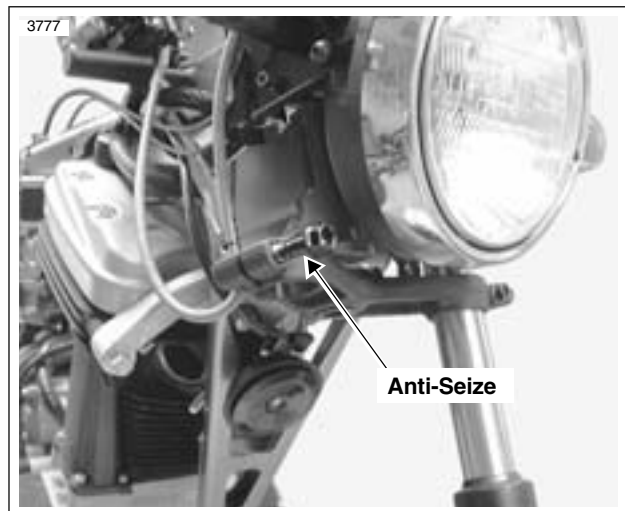


Figure 2-87. Triple Clamp Pinch Screw

3. See [Figure 2-88](#). Align and secure fork tubes.

- a. Position fork tubes so that top of each slider tube is flush with the top surface of upper triple clamp. Be sure that top surface of fork is not below top surface of upper triple clamp.
 - b. Tighten upper triple clamp pinch screws (at sliders) to 13-16 ft-lbs (18-22 Nm).
 - c. Tighten lower triple clamp pinch screws to 22-29 ft-lbs (30-39 Nm).
 - d. See [Figure 2-89](#). Tighten head lamp brackets flush against bottom of top triple clamp.
4. Install front fender. See [2.23 FENDERS](#).
 5. Install front wheel. See [2.5 FRONT WHEEL](#).
 6. Install front brake caliper. See [2.11 FRONT BRAKE CALIPER](#).
 7. Align head lamp. See [7.17 HEADLAMP](#).

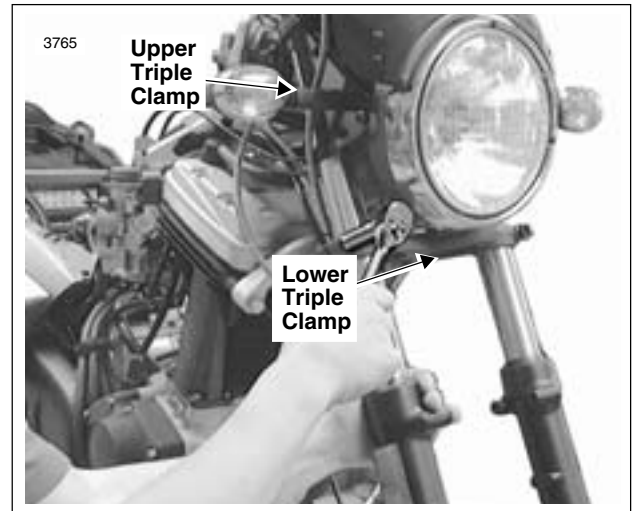


Figure 2-88. Pinch Screws

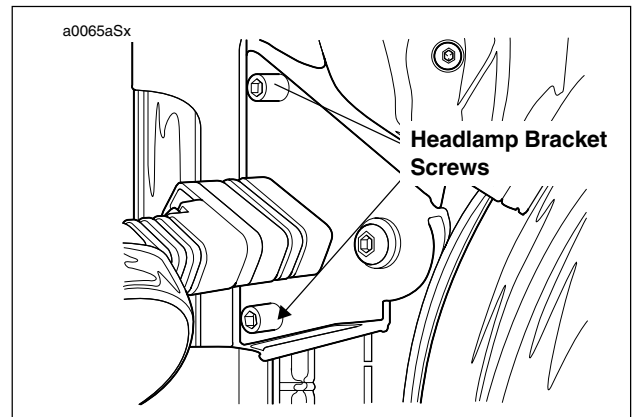


Figure 2-89. Tighten Head lamp Bracket

REMOVAL/DISASSEMBLY

1. Remove seat. See 2.28 SEAT.
2. Disconnect battery.

WARNING

To protect against shock and accidental start-up of vehicle, disconnect the negative battery cable before proceeding. Inadequate safety precautions could result in death or serious injury.

3. Remove dash. See 2.27 INSTRUMENT PANEL.
4. Remove handlebars. See 2.30 HANDLEBARS.
5. Remove fork assembly. See 2.17 FRONT FORK.
6. Remove ignition switch assembly. See 7.6 IGNITION/ HEADLAMP KEY SWITCH.
7. See Figure 2-90. Remove screw (9) and capnut (4).
8. Support lower triple clamp (6) and remove upper triple clamp (5).
9. Remove upper dust shield (3) and upper bearing (1).
10. Lower triple clamp can be removed.
11. Remove lower bearing (1) and lower dust shield (3) from lower triple clamp.

CLEANING AND INSPECTION

1. See Figure 2-90. Clean the dust shields (3), bearing cups (2), fork stem and lower triple clamp (6) and frame with solvent.
2. Carefully inspect bearing races and assemblies for pitting, scoring, wear and other damage. Replace damaged bearings (1) as a set (1, 2 and 3).
3. Check the fork stem and lower triple clamp (6) for damage. Replace if necessary.

ASSEMBLY/INSTALLATION

1. If removed, install **new** bearing cups into frame steering head using STEERING HEAD BEARING RACE INSTALLER (Part No. HD-39302).
2. Liberally coat the bearing cones (1) with grease using WHEEL BEARING PACKER TOOL (Part No. HD-33067). Work the grease into the rollers.
3. Install lower bearing.
 - a. Place lower bearing dust shield (3) over fork stem.
 - b. Find a section of pipe having an inside diameter slightly larger than the outside diameter of the fork stem.
 - c. Press bearing (1) with small end up onto fork stem and lower triple clamp (6). Use the pipe as a press-on tool.
4. Insert lower triple clamp (6) through the steering head. Install the upper bearing (1) with small end down and dust shield (3) onto fork stem.

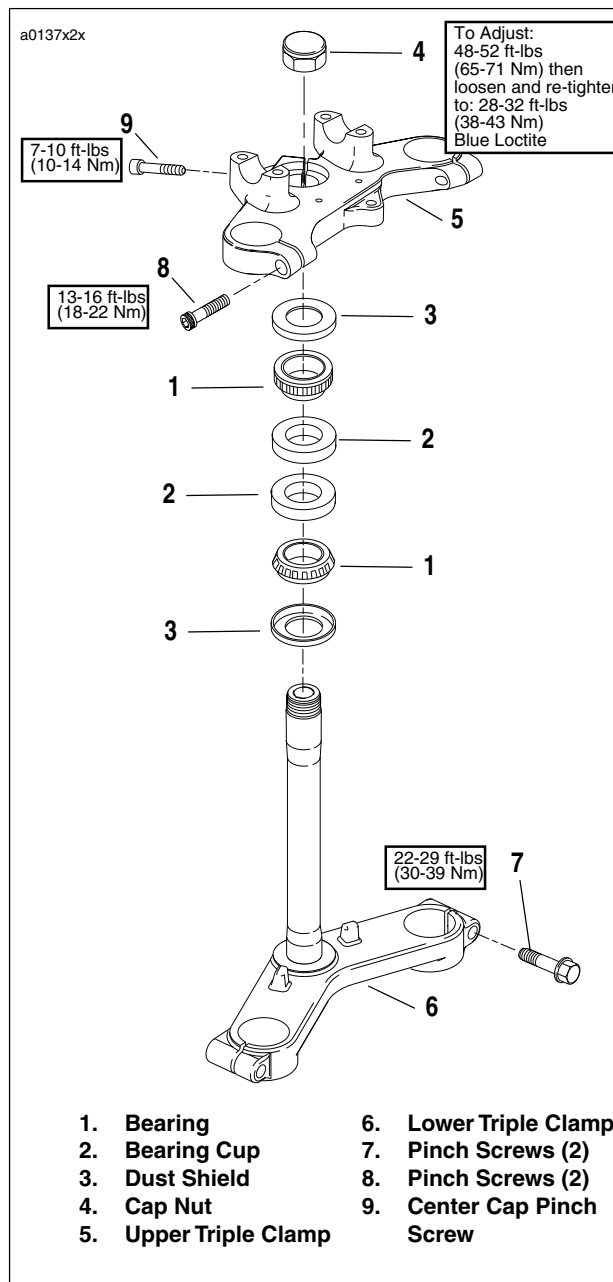


Figure 2-90. Fork Stem and Bracket Assembly

5. Apply LOCTITE THREADLOCKER 243 (Blue) to fork stem. Loosely install upper triple clamp (5) using cap nut (4).
6. Install fork assemblies. See 2.17 FRONT FORK.
7. Tighten cap nut (4) until the bearings have no free play. Make sure the fork stem turns freely, then tighten the fork stem clamp screw (9).
8. Check steering head bearing adjustment.
9. Install handlebars. See 2.30 HANDLEBARS.
10. Install dash. See 2.27 INSTRUMENT PANEL.
11. Connect battery negative cable.
12. Install seat. See 2.28 SEAT.

⚠ WARNING

After installing seat, pull upward on front of seat to be sure it is locked in position. If seat is loose, it could shift during vehicle operation, causing loss of control of vehicle and death or serious injury.

INSPECTION

Check steering head bearings:

- At the 1000 mile (1600 km) service interval.
 - At every 2500 mile (4000 km) service interval thereafter.
 - When storing or removing the motorcycle for the season.
 - Lubricate and adjust at every 20,000 mile (32,000 km) service interval.
1. Detach clutch cable at handlebar.
 2. Remove seat and fuel tank. See [4.2 FUEL TANK COVER/FUEL TANK](#).
 3. Attach lifting straps to frame tube behind steering neck. Raise front wheel off floor using a floor hoist and lifting straps.
 4. Turn front wheel to full right lock.
 5. See [Figure 2-91](#). Attach a spring scale into the hole in the front axle. With scale 90 degrees from fork leg, pull front wheel to center position. It should take **6.5-7 lbs (2.9-3.2 kg)** to pull front wheel to center.
 6. Attach clutch cable to handlebar.

⚠ WARNING

After installing seat, pull upward on front of seat to be sure it is locked in position. If seat is loose, it could shift during vehicle operation, causing loss of control of vehicle and death or serious injury.

7. Install seat and fuel tank. See [4.2 FUEL TANK COVER/FUEL TANK](#).

NOTE

Check that clutch and throttle cables do not bind when measuring bearing resistance.

Lubrication

At 10,000 miles (16,100 km) and every 10,000 miles (16,100 km) thereafter, lubricate the steering head bearings with [WHEEL BEARING GREASE \(Part No. 99855-89\)](#).

ADJUSTMENT

1. Detach clutch cable at handlebar.
2. Remove seat and fuel tank. See [4.2 FUEL TANK COVER/FUEL TANK](#).
3. Attach lifting straps to frame backbone behind steering neck. Raise front wheel off floor using a floor hoist and lifting straps.
4. Turn front wheel to full right lock.
5. See [Figure 2-91](#). Attach a spring scale into the hole in the front axle. Pull front wheel to center position. It



Figure 2-91. Steering Head Bearing Check

should take **6.5-7 lbs (2.9-3.2 kg)** to pull front wheel to center.

6. See [Figure 2-90](#). To adjust:
 - a. Loosen both pinch screws (7) on lower triple clamp.
 - b. Loosen center cap pinch screw (9) on upper triple clamp.
 - c. Loosen cap nut (1), then tighten to 48-52 ft-lbs (65-71 Nm) to seat bearing. Loosen cap nut, apply **LOCTITE THREADLOCKER 243 (Blue)** to threads of fork stem and retighten cap nut to 28-32 ft-lbs (38-43 Nm).
7. Recheck tension using spring scale. See Step 5.
8. Tighten both lower triple clamp pinch screws (7) to 22-29 ft-lbs (30-39 Nm).
9. Tighten center cap pinch screw to 7-10 ft-lbs (10-14 Nm).

⚠ WARNING

After installing seat, pull upward on front of seat to be sure it is locked in position. If seat is loose, it could shift during vehicle operation, causing loss of control of vehicle and death or serious injury.

10. Install seat and fuel tank. See [4.2 FUEL TANK COVER/FUEL TANK](#).

REMOVAL

1. Remove seat. See 2.28 SEAT.
2. Remove battery. See 7.16 BATTERY.

⚠ WARNING

Always disconnect the negative battery cable first. If the positive battery cable should contact ground with the negative cable installed, the resulting sparks may cause a battery explosion which could result in death or serious personal injury.

3. Remove right side footpeg support bracket. See 2.21 FOOTPEGS AND FOOTPEG SUPPORT BRACKETS.
4. Remove three bolts holding front sprocket cover. See 2.22 SPROCKET COVER.
5. Remove inner fender. See 2.23 FENDERS.
6. Remove lower belt guard. See 2.24 LOWER BELT GUARD.
7. Remove rear axle nut, axle, spacers and brake with carrier. See 2.6 REAR WHEEL.
8. Remove drive belt. See 1.11 DRIVE BELT AND REAR SPROCKET.
9. Remove rear wheel. See 2.6 REAR WHEEL.
10. Remove lower rear shock fastener. See 2.15 REAR SHOCK ABSORBER.
11. See Figure 2-92. Loosen swing arm pinch bolt (1).
12. Remove swingarm pivot bolt (6) and swingarm.
13. Remove well nuts from swingarm.
14. Use slide hammer (SNAP-ON Part No. CJ1275 or equivalent) and bearing remover to remove bearings (4).
15. Remove swingarm spacer (5).

INSTALLATION

1. See Figure 2-92. Install new bearings (4) and spacer (5).
2. Position swing arm in mounting block. Apply anti-sieze to swingarm bolt (6) and install. Torque to 24-26 ft-lbs (33-35 Nm).
3. Apply LOCTITE 243 BLUE to pinch bolt (1) and install. Torque to 17-19 ft-lbs (23-26 Nm).
4. Install well nuts.
5. Install rear shock and fastener. Torque to 35-40 ft-lbs (47-54 Nm).
6. Install rear wheel, axle, brakes, and spacers. Torque rear axle nut to 48-52 ft-lbs (65-71 Nm).

⚠ WARNING

After completing repairs or bleeding the system, always test motorcycle brakes at low speed. If brakes are not operating properly or braking efficiency is poor, testing at high speeds could result in death or serious injury.

7. Install drive belt.
8. Install rear fender, lower belt guard, and sprocket cover.

9. Loosely install right side footpegs mount.
10. Install reservoir, master cylinder, and brake pedal. Tighten brake pedal bolt to 6-8 ft-lbs (8-11 Nm).
11. Tighten footpeg mounting bracket.
12. Install battery. See 7.16 BATTERY.

⚠ WARNING

Always connect positive battery cable first. If the positive cable should contact ground with the negative cable installed, the resulting sparks may cause a battery explosion which could result in death or serious injury.

13. Install seat. See 2.28 SEAT.

⚠ WARNING

After installing seat, pull upward on front of seat to be sure it is locked in position. If seat is loose, it could shift during vehicle operation, causing loss of control of vehicle and death or serious injury.

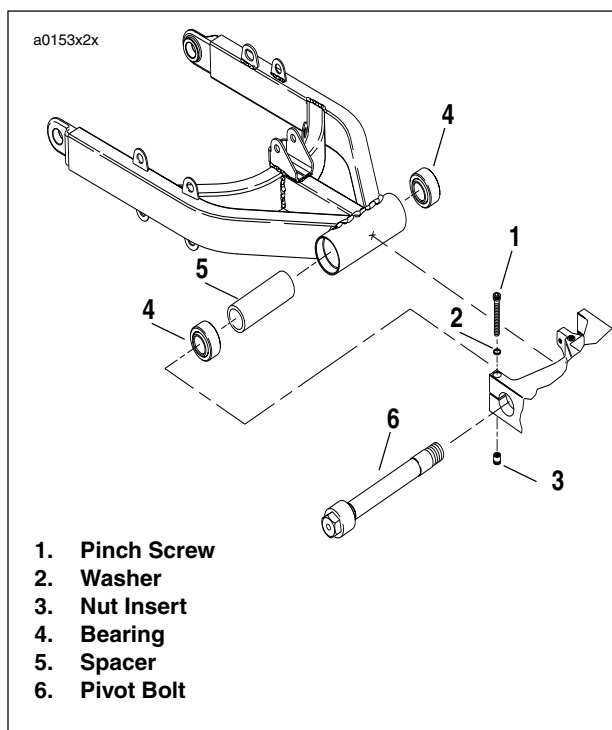


Figure 2-92. Swingarm

GENERAL

See Figure 2-90 for exhaust system assembly.

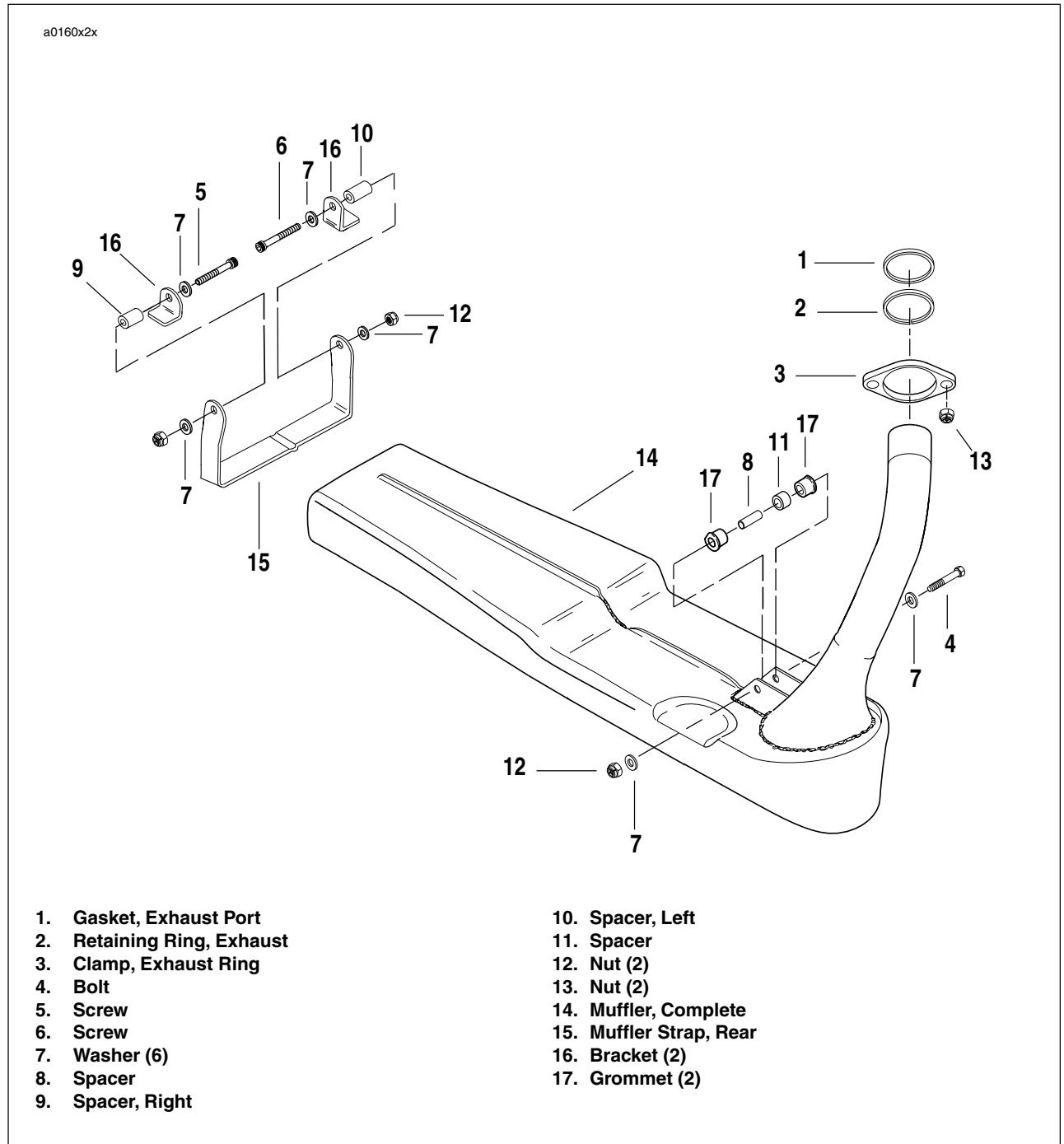


Figure 2-93. Exhaust System Assembly

MUFFLER REMOVAL

CAUTION

To prevent damage to muffler, secure muffler before removing rear muffler strap.

1. See [Figure 2-93](#). Remove fasteners, washers, spacers and brackets on rear muffler strap.
2. Remove exhaust header fasteners (13).
3. Remove front muffler mounting fastener, nut, and washer (4, 7, 12).
4. Remove exhaust header.
5. Remove retaining ring (2).
6. Remove exhaust header clamp (3).
7. Remove and discard exhaust port gasket (1).

MUFFLER INSTALLATION

1. See [Figure 2-93](#). Install new bushings and spacer onto front muffler support hole (8, 17, 11).
2. Install header clamp onto exhaust (3).
3. Install retaining ring oriented 90° from exhaust studs (2).

NOTE

Retaining ring may crack if not oriented as stated in step 3.

4. Install new exhaust port gasket (1).
5. Position muffler on motor. Hand tighten nuts (13).
6. Slide muffler over bushings on front mount.
7. Hand thread bolt washer and nut to front muffler support.
8. Install rear muffler strap(15).

NOTE

A rubber mallet may be used to tap the muffler strap into muffler notches.

9. Install right side muffler spacers (9), brackets (16) and fasteners (5).
10. Install left side muffler spacers, brackets and fasteners.
11. Hand tighten fasteners on rear muffler strap bolts (5,6).
12. Tighten lower, then upper header nuts to 6-8 ft-lbs (8-11 Nm).
13. Tighten rear strap bolts (5, 6) to 22-25 ft lbs (30-34 Nm).
14. Tighten front muffler bolts (4) to 22-25 ft lbs (30-34 Nm).

CAUTION

Use care when performing service procedures and avoid scratching the frame and/or painted parts. Failure to do so may result in corrosion of parts.

REMOVAL

Footpeg

1. See [Figure 2-94](#). Remove cotter pin (3).
2. Remove clevis pin (4).
3. Remove spacer (7, rear peg only).
4. Remove footpeg.

Footpeg Support Bracket

1. Remove seat. See [2.28 SEAT](#).
2. See [Figure 2-95](#). On left side remove oil tank drain hose, breather drain hose, p-clamp and fastener.
3. On right side remove rear master cylinder, spacers, reservoir, and brake pedal.
4. See [Figure 2-94](#). Remove mounting bolts located behind footpeg support bracket.
5. Remove footpeg support bracket.

INSTALLATION

Footpeg Support Bracket

1. Align footpeg support mounting bracket and spacer with mounting holes on frame.
2. Install mounting bolts and washers. Tighten fasteners to 25-30 ft-lbs. (34-41 Nm).
3. See [Figure 2-95](#). On left side install p-clamp with oil tank drain hose and breather hose.
4. On right side install rear master cylinder, spacers, reservoir, and brake pedal. See [2.13 REAR BRAKE MASTER CYLINDER](#).
5. Install seat. See [2.28 SEAT](#).

WARNING

After installing seat, pull upward on front of seat to be sure it is locked in position. If seat is loose, it could shift during vehicle operation, causing loss of control of vehicle and death or serious injury.

Footpeg

1. See [Figure 2-94](#). Align footpeg mounting holes with footpeg support bracket mounting holes.
2. Insert dowel pin (and on rear peg, spacer) through mounting holes.
3. Install new cotter pin.

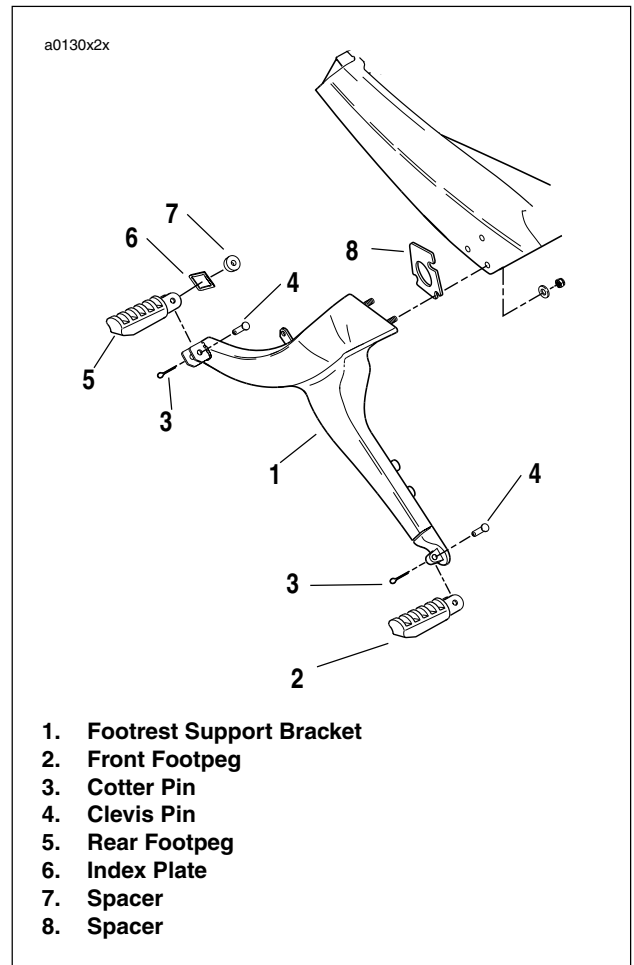


Figure 2-94. Footpeg Support Bracket (Left Side)

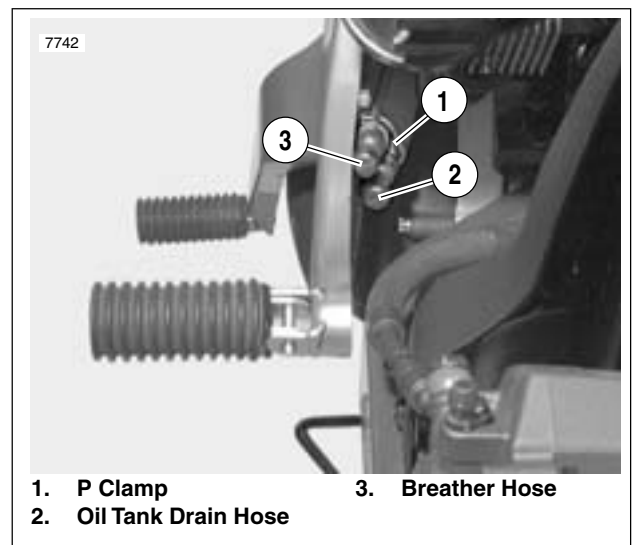


Figure 2-95. Left Side Footpeg Support Bracket

REMOVAL

1. See [Figure 2-96](#). Remove master cylinder bolts and spacers.
2. Remove rear pedal bolt and move pedal assembly down-away from support bracket.
3. See [Figure 2-97](#). Remove the three screws and washers on sprocket cover.
4. Slide cover free.

INSTALLATION

1. Apply LOCTITE THREADLOCKER 243 (Blue) to threads of three screws.
2. Position sprocket cover and install three screws and washers. Tighten fasteners to 30-36 **in-lbs** (3-4 Nm).
3. Move pedal assembly in position and install pedal bolt. Torque pedal bolt to 6-8 **ft-lbs** (8-11 Nm).
4. Install master cylinder bolts and spacers. See [2.13 REAR BRAKE MASTER CYLINDER](#).

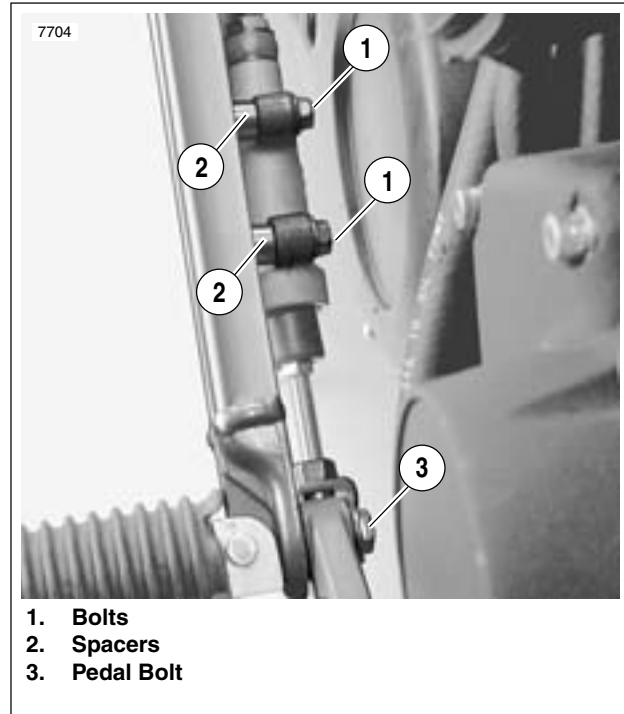


Figure 2-96. Master Cylinder Mounting

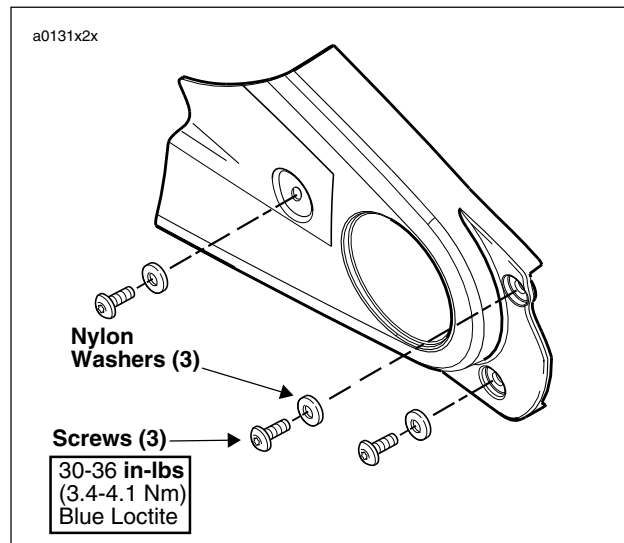


Figure 2-97. Sprocket Cover

FRONT FENDER REMOVAL

1. Raise front wheel off ground.
2. Remove front wheel. See [2.5 FRONT WHEEL](#).
3. See [Figure 2-98](#). Remove four lower fender mounting screws.
4. See [Figure 2-99](#). Remove front fender.

FRONT FENDER INSTALLATION

1. Raise front wheel off floor.
2. Align front fender mounting holes with front fork bracket.

NOTE:

The longer end of the fender faces away from the front end.

3. Apply LOCTITE THREADLOCKER 243 (Blue) to first few threads of four fender mounting screws.
4. See [Figure 2-98](#). Install front fender with four fender mounting screws.
5. Tighten fender mounting screws to 27-30 **in-lbs** (3.1-3.4 Nm).

REAR FENDER REMOVAL

1. Remove seat. See [2.28 SEAT](#).
2. Remove right side footpeg support. See [2.21 FOOTPEGS AND FOOTPEG SUPPORT BRACKETS](#).
3. See [Figure 2-100](#). Remove rear fender mounting screws and washers from rear fender.
4. Remove rear fender.

REAR FENDER INSTALLATION

1. Position rear fender.
2. Install rear fender mounting screws, washers and well-nuts on rear fender.
3. Tighten rear fender mounting screws to 30-36 **in-lbs** (3-4 Nm).
4. Install right side footrest support bracket. See [2.21 FOOTPEGS AND FOOTPEG SUPPORT BRACKETS](#).
5. Install seat. See [2.28 SEAT](#).

WARNING

After installing seat, pull upward on front of seat to be sure it is locked in position. If seat is loose, it could shift during vehicle operation, causing loss of control of vehicle and death or serious injury.

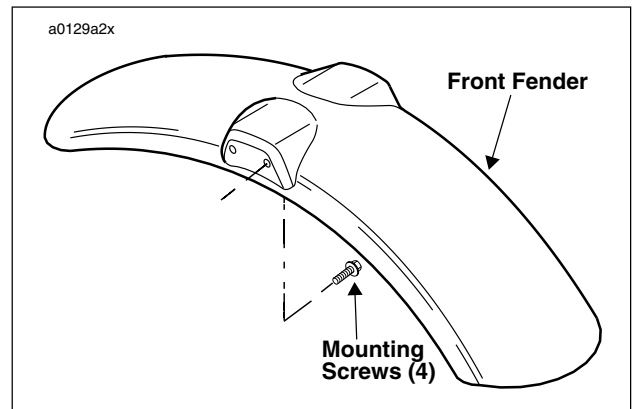


Figure 2-98. Front Fender Assembly



Figure 2-99. Removing Front Fender

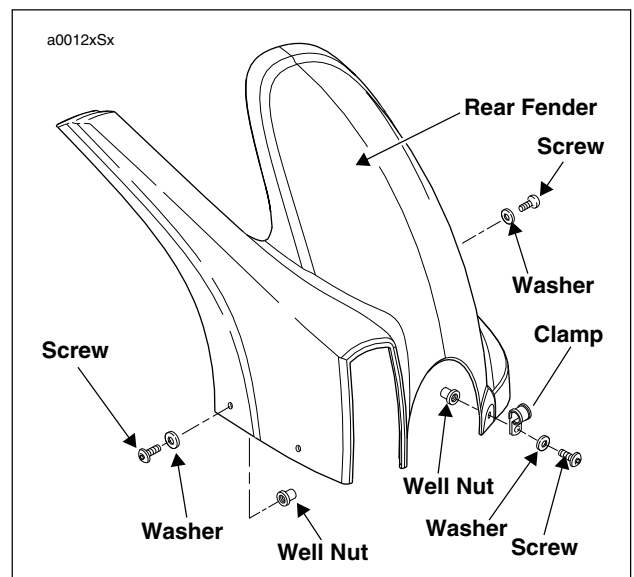


Figure 2-100. Rear Fender Assembly

REMOVAL

1. See [Figure 2-101](#). Remove two screws and nylon washers securing lower belt guard to swingarm.
2. Remove belt guard.

INSTALLATION

1. Position belt guard over tabs on swingarm.
2. Secure belt guard with two screws and nylon washers.
3. Tighten screws to 30-36 **in-lbs** (3-4 Nm).

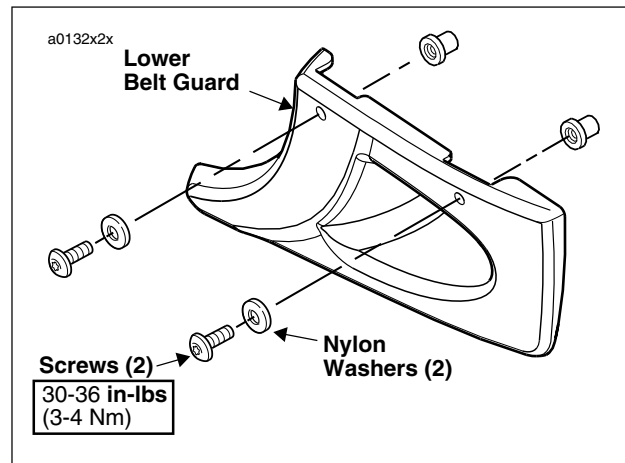


Figure 2-101. Lower Belt Guard

REMOVAL-TAIL SECTION

1. Remove seat. See 2.28 SEAT.
2. See Figure 2-102. Remove fasteners and clamp (3, 19 and 20).
3. Remove tree fasteners (2).
4. Remove tail section (1).

WARNING

To protect against shock and accidental start-up of vehicle, disconnect the negative battery cable before proceeding. Inadequate safety precautions could result in death or serious injury.

5. Disconnect battery negative cable.

6. Unplug taillight.
7. Cut tie wrap holding taillight and turn signal wires.
8. Unplug turn signals.
9. Remove nut (8) and washer (7).
10. Remove turn signals (6).
11. Remove nuts and flat washers from back of taillight.
12. Remove taillight.
13. Remove bolts (4) and nuts (9).
14. Remove license plate bracket (5).

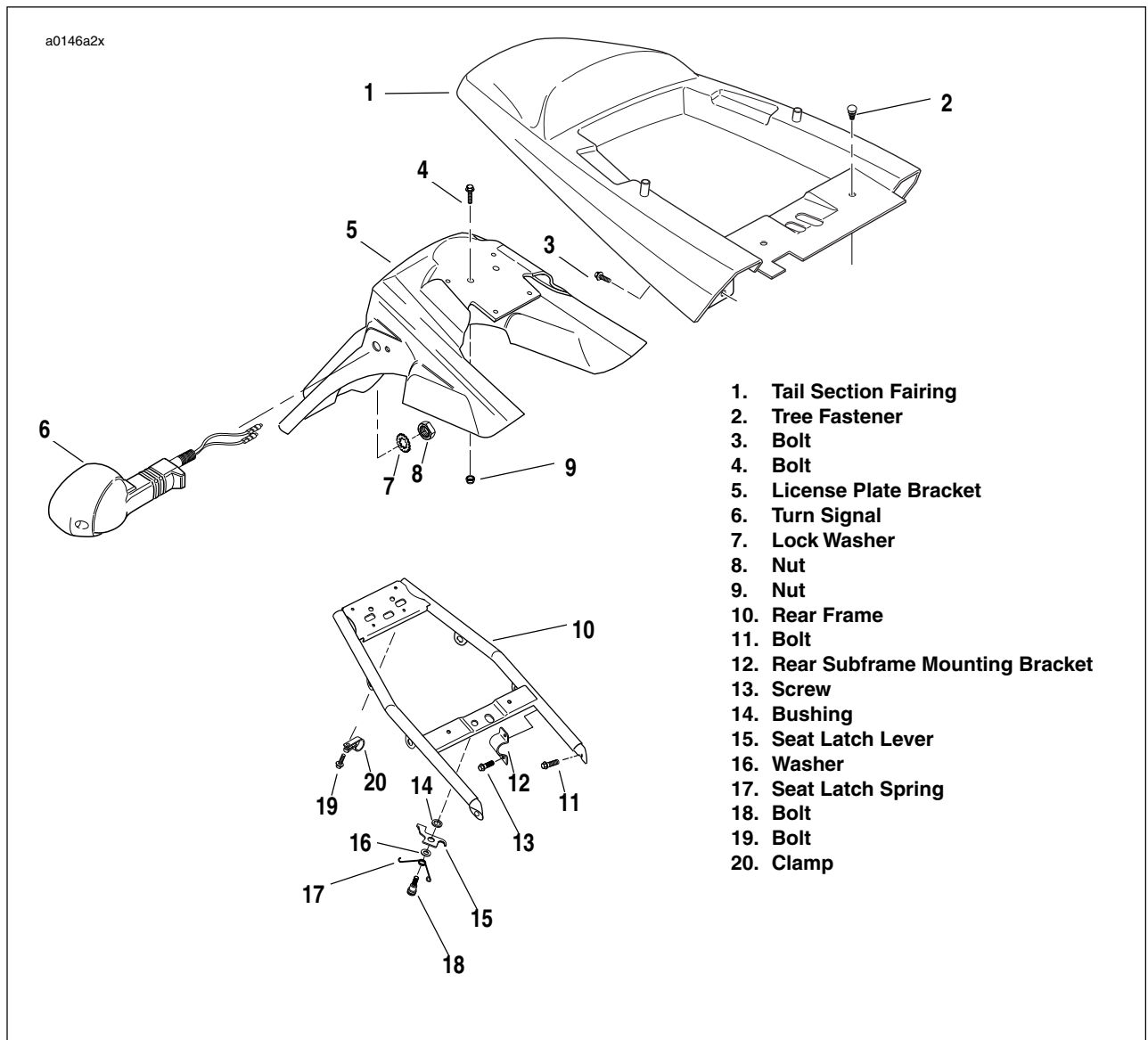


Figure 2-102. Tail Section

REMOVAL - REAR FRAME ASSEMBLY

1. Remove tail section.
2. Disconnect rear wire harness connector [7] (6-place amp), located under seat near fuse block. Detach connector from "T" stud.
3. See [Figure 2-102](#). Remove fasteners (13) and bracket (12).
4. Remove fasteners (11).
5. Slide rear frame assembly (10) out.

INSTALLATION - REAR FRAME ASSEMBLY

1. Slide rear frame assembly (10) into frame.
2. Install fasteners (11).
3. Install brackets (12) and fasteners (13).
4. Connect rear wire harness and mount on "T" stud.

INSTALLATION - TAIL SECTION

1. Install license plate bracket (5) using fasteners (4) and nuts (9) in rear holes.
2. Install taillight using flat washers and nuts.
3. Install turn signals (6) using lock washers (7) and nuts (8).
4. Connect turn signal wires and taillight wires. Cable tie together.
5. Install tail section (1) using fasteners (3, 19, 20).
6. Connect battery negative cable.
7. Install seat. See [2.28 SEAT](#).

WARNING

After installing seat, pull upward on front of seat to be sure it is locked in position. If seat is loose, it could shift during vehicle operation, causing loss of control of vehicle and death or serious injury.

REMOVAL

1. See [Figure 2-103](#). Remove two screws and nylon washers on each side.
2. Remove windscreen.
3. See [Figure 2-104](#). Remove windscreen trim.
4. Remove windscreen mounting brackets.



Figure 2-103. Remove Screws

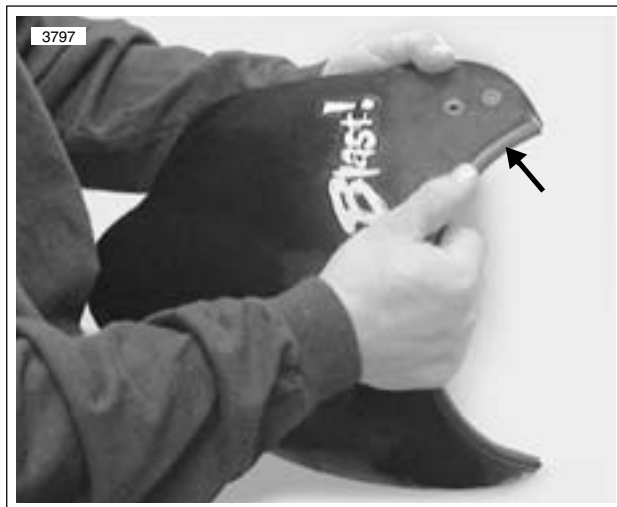


Figure 2-104. Windscreen Trim

INSTALLATION

1. If removed, install both windscreen brackets. See [7.17 HEADLAMP](#).
2. Verify trim is installed on windscreen.
3. Install two screws and nylon washers on each side. Tighten screws to 9-11 **in-lbs** (1 Nm).

REMOVAL

1. See Figure 2-105. Remove two mounting screws and instrument panel.
2. Remove two screws from back of instrument panel.
3. Remove rubber boot and odometer reset switch.
4. Depress tab and remove speedometer connector [39].

NOTE

To remove speedometer, see 7.25 ELECTRONIC SPEED-OMETER.

INSTALLATION

1. Install odometer reset switch to instrument panel and install rubber boot.
2. Install connector [39] on back of speedometer.
3. Apply LOCTITE THREADLOCKER 243 (Blue) to threads of mounting screws. Install dash with two mounting screws. Tighten screws to 30-36 in-lbs (3-4 Nm).

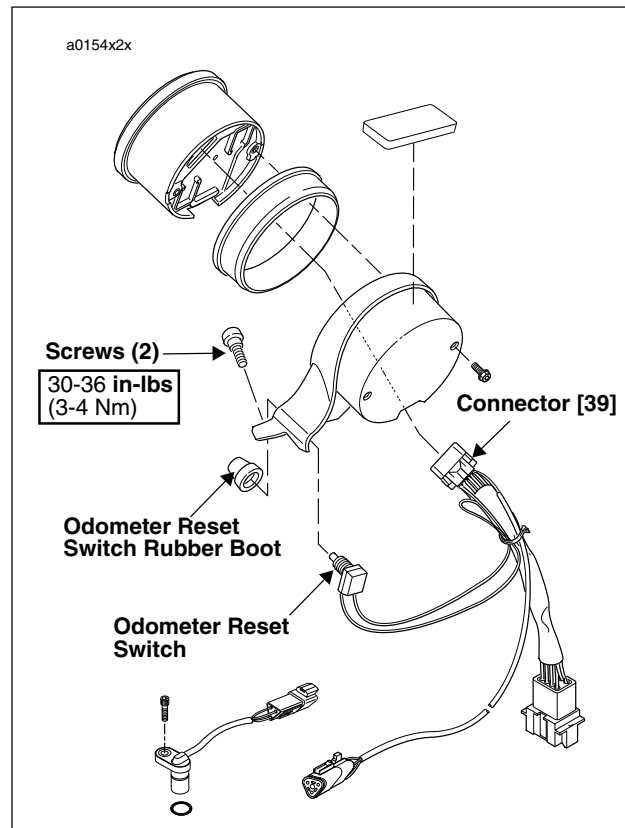


Figure 2-105. Instrument Panel

REMOVAL

CAUTION

Use both hands to release tension on the seat latch to avoid pinching fingers.

You will need to use both hands during this operation to release tension on the seat latch (located beneath the seat).

1. See Figure 2-106. Push or pull the seat latch toward the front of the motorcycle with your thumb.
2. Grasp the rear section of the seat with one hand.
3. Lift seat away from motorcycle to loosen from frame.

INSTALLATION

1. See Figure 2-107. Locate tab on bottom of seat.
2. See Figure 2-108. Ensure seat is upright. Grasp the rear section of the seat with one hand and grasp the front section of the seat with the other hand.
3. See Figure 2-109. Push seat forward while flexing the rear section of the seat upward until the tongue locks into the bracket located on the frame.
4. Push down firmly on the seat

NOTE

You will hear a click when the locating tab and seat latch, lock together correctly.

5. Ensure seat is locked in position.

WARNING

After installing seat, pull upward on front of seat to be sure it is locked in position. If seat is loose, it could shift during operation of vehicle and result in death or serious injury.

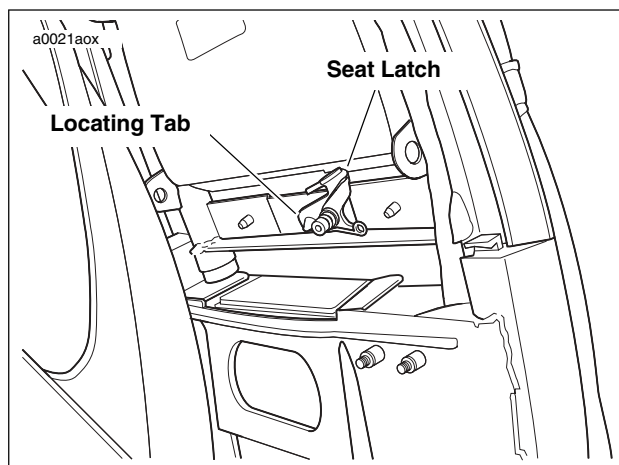


Figure 2-106. Seat Latch

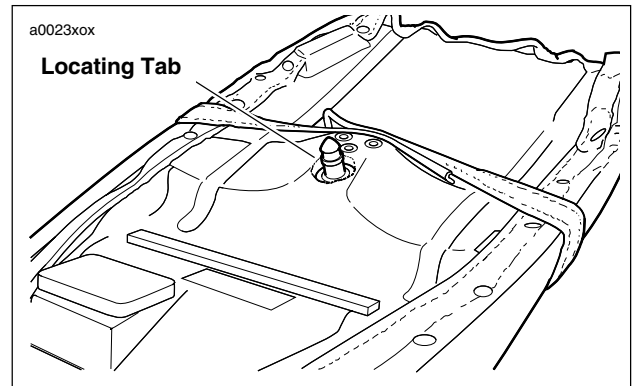


Figure 2-107. Underside View of Seat

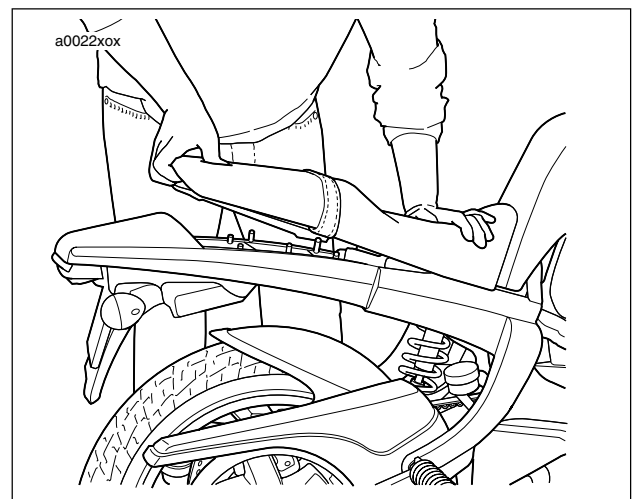


Figure 2-108. Seat Installation

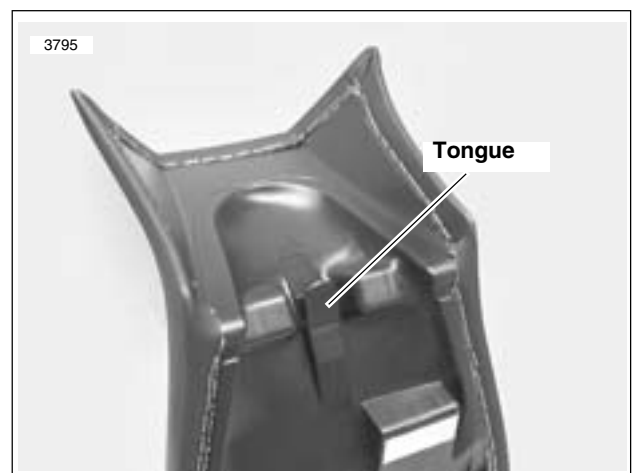


Figure 2-109. Locking Seat Tongue

GENERAL

⚠ WARNING

- If the side stand is not in the full forward position when vehicle weight is rested on it, the vehicle could fall over which could result in death or serious injury.
- Always park motorcycle on a level, firm surface. Vehicle weight could cause motorcycle to fall over, which could result in death or serious injury.

See Figure 2-110. The side stand is located on the left side of the motorcycle. The side stand swings outward to support the motorcycle for parking.

Test the side stand in the following manner. Without vehicle weight resting on it, side stand should move freely into extended (down) and retracted (up) positions.

The side stand activates the side stand switch (4) which is part of the starter interlock system.

INSPECTION

1. Test the side stand with the vehicle upright and level. The side stand should move freely into extended down and up position.
2. Check side stand switch operation after first 1000 miles and every 2500 miles.

DISASSEMBLY/REMOVAL

1. Raise rear wheel off floor using REAR WHEEL SUPPORT STAND (Part No. B-41174).
2. Disconnect electrical connection.
 - a. Press Tab indent
 - b. Pull connectors apart.
3. Cut tie wrap from rear brake line.
4. Remove spring (2) from side stand.
5. Remove cotter pin and pivot pin (1).
6. Remove side stand from frame.

ASSEMBLY/INSTALLATION

1. Apply LITHIUM GREASE to pivot pin.

NOTE

Do not crush side stand switch during installation.

2. Install side stand using pivot pin and cotter pin.
3. Connect spring to side stand and spring pin.
4. Remove REAR WHEEL SUPPORT STAND (Part No. B-41174).
5. Inspect side stand and sidestand switch for proper operation.

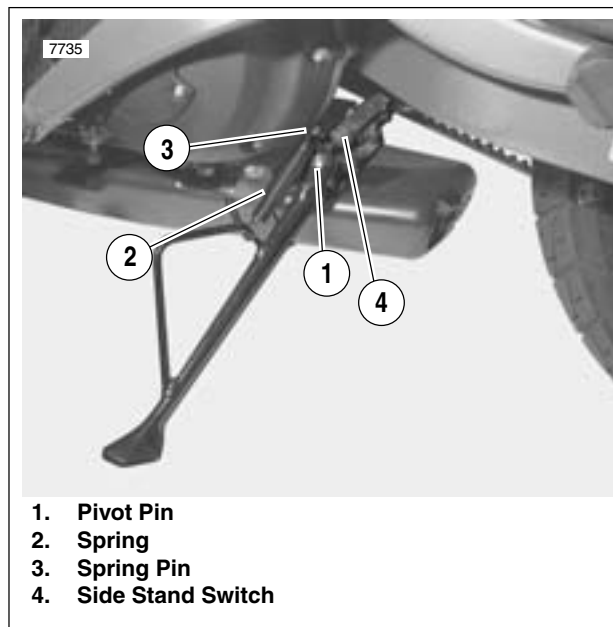


Figure 2-110. Side Stand

REMOVAL

1. See [Figure 2-111](#). Remove left side switch housing (13).
2. Loosen clutch adjuster and remove cable (8).
3. Unplug clutch interlock (9).
4. Remove hand grip (12)
5. Loosen lever holder bolt (4) and slide off of handlebar (3).
6. Slide rubber boot off the throttle cable adjusters. Loosen cable adjuster lock on each adjuster.
7. Remove two screws on front housing. Separate housings (14) from handlebar.
8. Remove cables from notches in housings.
9. Unhook ferrules from cable wheel.
10. Remove throttle grip (15).
11. Remove front master cylinder clamp bolts.
12. Remove master cylinder.
13. Remove handlebar clamp screws (1) and riser caps (2).
14. Remove handlebar (3).

INSTALLATION

1. Position bar (3) on risers.
2. Install riser caps (2) and bolts (1).
3. Tighten bolts in steps maintaining even gap between riser and cap. Final torque to 10-12 ft-lbs. (14-16 Nm).
4. Install master cylinder. Tighten master cylinder clamp bolts to 80-120 **in-lbs.** (9-14 Nm).
5. Install throttle grip.
6. Hook ferrules to cable wheel. Position cables in notches of switch housing (14).
7. Position housings on right handlebar. Front housing has locating pin that must align with hole in handlebar. Install fasteners, longer screw on bottom. Tighten fasteners to 25-33 **in-lbs** (3-4 Nm).
8. Plug in front brake lever switch (16).
9. Install clutch perch. Torque clutch lever screw (4) to 50-60 in-lbs (6-7 Nm).
10. Install hand grip (12).
11. Install clutch cable (8).
12. Adjust clutch. See [1.9 CLUTCH](#).
13. Plug terminal into clutch interlock switch (9).
14. Install left side switch housing (13). Torque fasteners to 25-33 **in-lbs** (3-4 Nm).

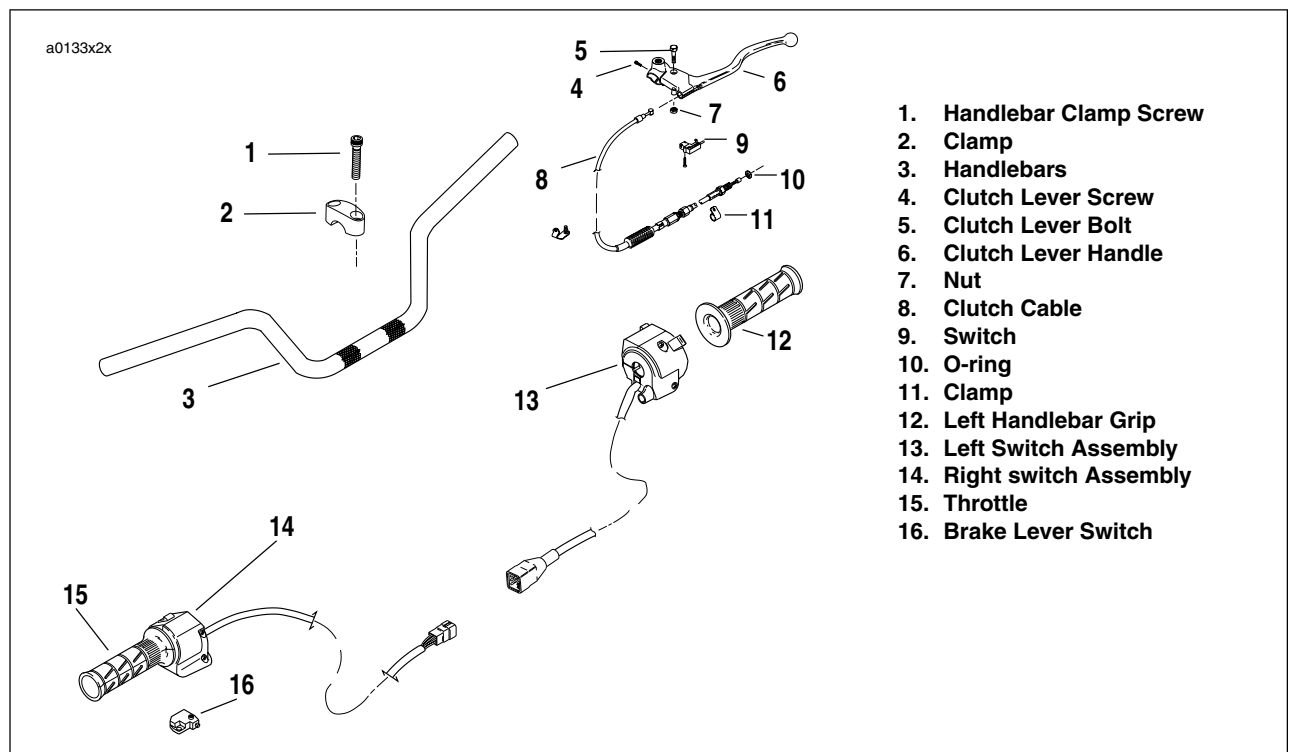


Figure 2-111. Handlebar Assembly

FRONT ISOLATOR

Removal

1. Remove seat. See [2.28 SEAT](#).
2. Remove fuel tank. See [4.2 FUEL TANK COVER/FUEL TANK](#).
3. Raise motorcycle until front suspension is unloaded.
4. Remove muffler, and support motor with jack. When isolator is detached powertrain may move. See [2.20 EXHAUST SYSTEM](#).
5. Cut horn cable tie.
6. Remove clutch cable tie.
7. See [Figure 2-112](#). Loosen front ground strap bolt for clearance.
8. See [Figure 2-113](#). Remove two outboard isolator bolts (1).
9. Remove main isolator bolt (2) and nut. Discard nut.
10. Remove isolator.

Installation

1. See [Figure 2-113](#). Position new isolator in frame.
2. Install two outboard isolator bolts (1). Torque 30-33 ft-lbs (41-45 Nm).
3. Install main isolator bolt and **new** nut (2). Tighten main isolator bolt to 63-70 ft-lbs (85-95 Nm).
4. Tighten front ground strap bolt to 30-33 ft-lbs (41-45 Nm)
5. Install clutch cable to clip.
6. Install horn tie wrap.
7. Install fuel tank. See [4.2 FUEL TANK COVER/FUEL TANK](#).

WARNING

After installing seat, pull upward on front of seat to be sure it is locked in position. If seat is loose, it could shift during vehicle operation, causing loss of control of vehicle and death or serious injury.

8. Install seat. See [2.28 SEAT](#).

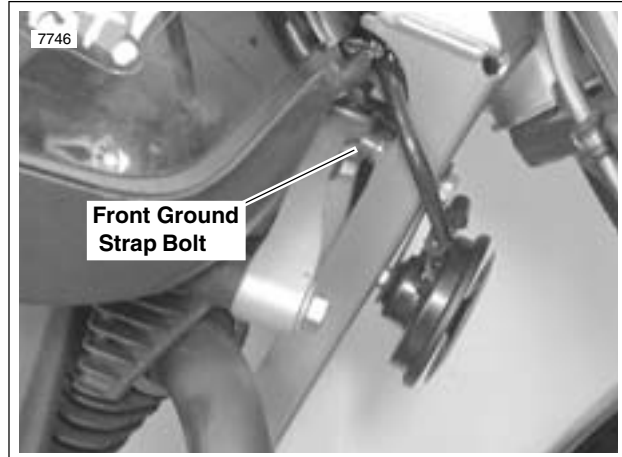
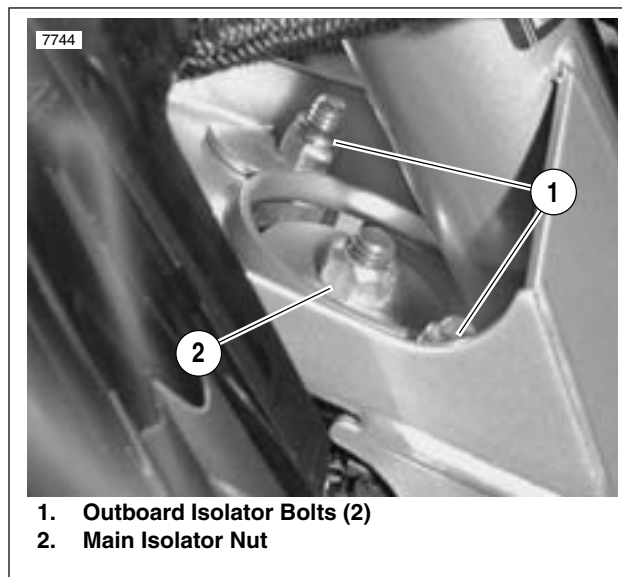


Figure 2-112. Front Tiebar Bolt



1. Outboard Isolator Bolts (2)
2. Main Isolator Nut

Figure 2-113. Front Isolator Bolts

REAR ISOLATOR

Removal

1. Remove seat. See [2.28 SEAT](#).

⚠ WARNING

Always disconnect the negative battery cable first. If the positive battery cable should contact ground with the negative cable installed, the resulting sparks may cause a battery explosion which could result in death or serious personal injury.

2. Remove battery. See [7.16 BATTERY](#).
3. Support rear of motorcycle.
4. Remove rear shock. See [2.15 REAR SHOCK ABSORBER](#).
5. Remove muffler and support motor with jack. When isolator is detached powertrain may move. See [2.20 EXHAUST SYSTEM](#)
6. See [Figure 2-114](#). Remove two allen bolts connecting frame to isolator.
7. See [Figure 2-115](#). Remove four bolts (2) connecting isolator (1) to engine.

NOTE

It may be necessary to raise or lower motorcycle to remove isolator.

Installation

1. Clean engine bolt holes and bolts. Do not re-tap holes.
2. Apply LOCTITE 243 BLUE to bolts and install four isolator-to-engine bolts. Torque bolts to 32-34 ft-lbs (46-50 Nm).
3. Apply LOCTITE 272 RED to the two frame-to-isolator bolts. Torque bolts to 30-33 ft-lbs (41-45 Nm).
4. Install rear shock absorber. See [2.15 REAR SHOCK ABSORBER](#).

⚠ WARNING

Always connect positive battery cable first. If the positive cable should contact ground with the negative cable installed, the resulting sparks may cause a battery explosion which could result in death or serious injury.

5. Install battery. See [7.16 BATTERY](#).

⚠ WARNING

After installing seat, pull upward on front of seat to be sure it is locked in position. If seat is loose, it could shift during vehicle operation, causing loss of control of vehicle and death or serious injury.

6. Install seat. See [2.28 SEAT](#).

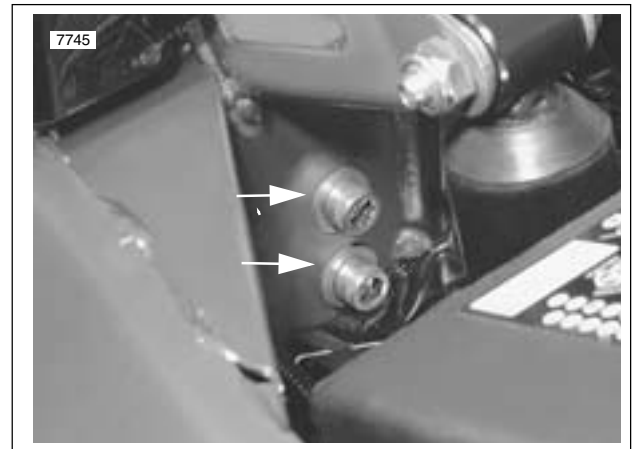


Figure 2-114. Frame-to-Isolator Bolts

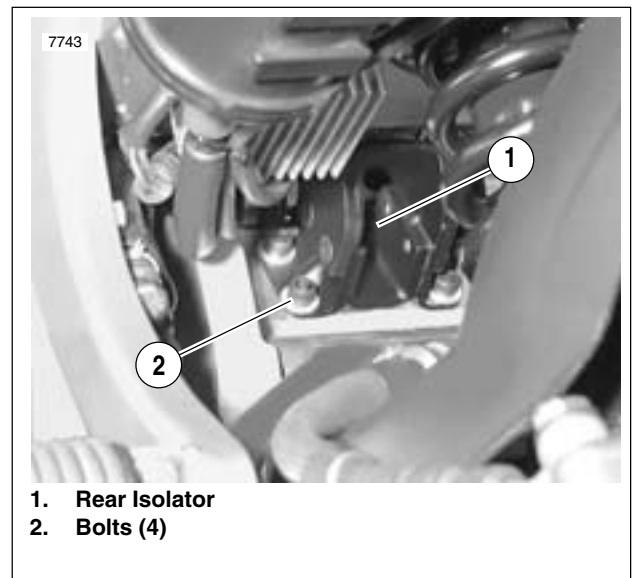


Figure 2-115. Rear Engine Mount Isolator

NOTES
